

May 26. An hour's trip to the swamp resulted in a number of "finds." Leaving the road near the two ponds I went along the grassy bank between them. Almost immediately I came upon a small colony of *Spiranthes latifolia*. Only one plant was in blossom though the entire colony looked strong and vigorous. This orchid is not common in Connecticut being reported from only three stations. I have since located three other colonies of it.

At the north end of one of the ponds a stranded piece of board attracted my attention and presently I was rewarded for an almost microscopic survey, by finding three tiny plants of *Utricularia minor* in flower and fruit. Much care was needed to separate the filmy seaweed-like plants from the entangling pond drift. One specimen was especially fine, the plant being about $2\frac{1}{2}$ inches long. This *Utricularia* was new to me. Bishop's list locates it at Hamden and New Haven.

Leaving the ponds I plunged into the swamp. There among the tangle of ferns, skunk cabbage and *Tiarella* I found a large colony of *Mitella nuda*, L. This species so far as I know, has never been reported from Connecticut. May 19, I had found a small colony of this same species on the other side of the same swamp. Both colonies seemed well established.

The flower is so very tiny and lace-like that it may be easily overlooked. Doubtless a more careful survey of swamps on the northern border of our state would result in its being found in other localities.

Before reaching home I had added three unusual grasses, *Poa debilis*, *Avena striata* and *Oryzopsis asperifolia*, to my collection.

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A BEAUTIFUL PLUTEOLUS.

H. WEBSTER.

THE species of the genus *Pluteolus* are so few and of such occasional occurrence that they are not generally known. It is of little avail to search especially for them, a remark applicable to many another toadstool, as collectors know well enough. The rarer species happen under ones eyes quite accidentally, if at all. It was only after some years of experience in the field that the writer made the

acquaintance of the genus, and then through the kindness of a friend, who showed him the delicate pinkish gray *P. coprophilus* Peck growing on a heap of street sweepings by the side of the boulevard in Allston, Massachusetts. A second species, *P. expansus* Peck, appeared near the laboratory of the Alstead School in late July, 1902, and gave material for a few notes.

The genus *Pluteolus* is closely similar to the more familiar *Pluteus*. The free gills, fibrous-cartilaginous stem, and absence of veil or ring, make the two genera easy of recognition, and the brown spores of the former quickly distinguish it from the rosy-spored *Pluteus*.

Pluteolus expansus, Peck, the species observed in Alstead, New Hampshire, is not a good example of the genus. In fact its author¹ placed it originally under *Galera*. Twenty years later,² in a revision of the species of the genus growing in the State of New York, he transferred it to *Pluteolus*, remarking:

"The species has been removed to this genus because of the visciduity of the pileus, nevertheless it must be confessed that such a feature is scarcely satisfactory for generic distinction." Moreover, the gills, as he also notes, are slightly attached.

Examination of the Alstead specimens showed a stronger reason for this transfer, in the relation of the stipe to the pileus. The substance of the two is plainly not homogeneous, a characteristic emphasized by Fries³ in establishing for the *Pluteoli* a separate (sub-) genus.

The Alstead plants showed themselves after rain in grassy ground, near horse droppings. The viscid, greenish yellow caps, elevated on long slender stems, white, tinged with yellow, announced a novelty at first sight. When the plants were fresh and moist the color was charming in its delicacy. As they dried, the greenish tint faded, and gave place at last to grayish yellow or brown. There was scarcely any substance to the caps, except at the centre. They were translucently thin, long and deeply striate, the attenuated margin, from a side view, appearing gracefully arched between the attachments of

¹ Peck: 26th Report of the N. Y. State Museum, p. 58.

² ib.: 46th Report, p. 60.

³ Fries: *Hymenomycetes Europaei*, p. 266, "*Pileus carnosulus, viscidus* *Stipes subcartilagineus, ab hymenophoro discretus*. *Lamellae rotundato-liberae omnino Pluteorum*. Ob has notas necesse videtur *Pluteolos* peculiare subgenus censere, inter *Hyporhodos Pluteis* analogum."

the yellowish gills. Though apparently smooth when moist, the caps were pruinose, or fibrous-pruinose when dry. The gills, though appearing free, were rounded behind up to a very slight attachment. The brittle stem, long, hollow, and rather thin-walled, was yellow-scurfy below and mealy pruinose above, with obscure striations at the tip. The base, in some specimens, was slightly swollen. In the dried plant the gills became cinnamon color.

The spores, $12\frac{1}{2}$ to 15μ by $7\frac{3}{4}$ to 9μ , were broadly elliptical, smooth, very regularly rounded at one end, a little flattened or blunted at the other. In side view they showed a depression on one side, and thus appeared concavo-convex.

In the buttons the pileus was somewhat globular, with straight margins, appressed at first. Later the pileus became hemispherical rather than campanulate, and was finally expanded and upturned, exposing the mature brown gills. The expanded plants were 1 to $1\frac{3}{4}$ inch broad; the stems were 3 to 4 inches high, and slender, though proportionally thicker than in *Galera* or *Panaeolus*.

A plant so delicate as this is soon affected by hot sun. It is seen at its best on a cloudy day, or early in the morning, and is most beautiful when beaded with moisture, that clings in minute globules to the tips of the fibrils on the stem.

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SOME NOTES ON MOSSES, WITH EXTENSIONS OF RANGE.

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HYPNUM CORDIFOLIUM, Hedw. In specimens collected by Dr. R. H. True at North Haven, Maine, Sept. 2, 1900, the alar regions of the leaves of some stems show all gradations from the gradually enlarged cells of typical *H. cordifolium* to forms in which they are abruptly enlarged, making well defined auricles. The leaves of the specimens which exhibit the last mentioned character are often smaller than in the typical plant, otherwise the characters are apparently identical. The peculiarity of having the alar cells more or less abruptly inflated seems to be rather characteristic of certain stems in material which